

## Determinants of smoking among Program Keluarga Harapan beneficiaries in West Jakarta

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### Abstract

**Purpose:** Program Keluarga Harapan (PKH) is a strategic government program that wants to help the poor meet their health needs. However, there are still PKH beneficiaries who do not understand the health mission of this program. This study intends to explore smoking behavior among PKH families beneficiaries and whether program providers pay attention to promoting healthy living for their beneficiaries. **Method:** This study uses primary data with cross-sectional design and multiple logistic regression. The number of samples analyzed was 379 households in the Kembangan Region of West Jakarta. **Results:** Eighty-two percent of PKH recipients were smokers. The four variables related to smoking are low education, low income, smoking psychological dependence, and socially motivated smoking. The psychological and social factors of smoking were among strong predictors and deserve attention in the PKH program. **Conclusion:** The long-term goal of PKH is to improve the health quality. Smoking reduces the health quality of PKH beneficiaries. The Ministry of Social Affairs needs to coordinate with the Ministry of Health to make this program an entry point for the movement of healthy living in PKH recipient families.

**Keywords:** smoking, Program Keluarga Harapan (PKH), social assistance program, KPM-PKH, beneficiaries

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## INTRODUCTION

Poverty is one of the problems in the world. The World Bank released the latest data in 2018 regarding the global poverty rate, which reached 10 percent of the world's population. Residents are classified as poor if the income earned is less than 1.90 US dollars per day. The number of poor people decreased by 10 percent from 2015 and down 11.2 percent from 2013. In 2015, there were 735.9 million people living below poverty, down 68.3 million from 804.2 million in the previous two years, which will almost be the goal of reducing poverty to 3 percent by 2030 [1].

The Central Statistics Agency (BPS), 2018 states that Indonesia is the country with the largest population of around 260 million people and a population with per

capita expenditure per month below the poverty line reaching 25.95 million people or 9.8 percent, reduced by 633.2 thousand people compared to the conditions in September 2017 of 26.58 million people or 10.12 percent [2]. Food commodities have a more significant role than non-food in the poverty line's value both in urban and rural areas [3]. Each country has different direct assistance, but several studies reported that cash transfer programs can reduce poverty directly (Immediate Poverty) and improve human development in the long term [3].

Poverty reduction in Indonesia are carried out through several schemes: conditional cash assistance for poor households, piloted in Indonesia since 2007 through the PKH in seven provinces, adopted from a similar Conditional Cash Transfer (CCT) program from

various countries. PKH has specific objectives, including increasing access of the poor to education and health services. This assistance helps participants invest in human resources. Sanctions take the form of reducing the amount of assistance until PKH membership is issued if there are PKH participants who do not comply with the stipulated obligations. The two components are education and health [4].

Beneficiaries of social assistance have a positive correlation with smoking behavior with the highest effect on PKH beneficiaries. They have an 11% higher chance of smoking than those who did not receive PKH [5]. Indonesian Socio-Economic Data as of September 2017 reported that rice contributed to the largest poverty by 18.8% in urban areas and 24.52% in rural areas. The second factor contributing to poverty is kretek cigarettes, which account for 9.98% of urban poverty and 10.7% in rural areas [6].

The World Health Organization (WHO) notes that most smokers worldwide come from poor and developing countries. WHO mentioned several facts about tobacco (cigarettes), that in 2015 there were around 1.1 billion smokers worldwide, and from existing data, about 800 million or more or 80 percent came from low and middle-income countries, the remaining 20 percent from rich countries. According to the WHO report, poor people in Bangladesh spend ten times their income buying cigarettes than on education. The poor in Egypt spend 10 percent of their household needs on cigarettes. Meanwhile, Indonesia's shocking fact is that low-income families spend 15 percent of their income on buying cigarettes.

Social assistance beneficiaries have a higher tendency to smoke and consume higher cigarettes than non-beneficiaries of social assistance. Also, beneficiaries of social assistance and smokers have lower nutrition, education, and health indicators. PKH beneficiaries have a monthly expenditure of 6,544 rupiah cigarettes, higher than non-PKH beneficiaries, and smokers have children under the age of 15 who get sick more often than non-smokers.

Smoking can cause hypertension due to tobacco chemicals that can damage the inner lining of artery walls, making the arteries more prone to plaque buildup (atherosclerosis). Hypertension ranks first as many as 2,110 patients in Kembangan District, West Jakarta. The Knock Door to Serve With Hat Program (KPLDH) at the primary health care (Puskesmas) recorded the number of smokers in Kembangan District in 2018, totaling 6,302 of 277,371 residents.

Smoking remains prevalent in lower-income families; many PKH beneficiaries remain unaware about the program's health mission. Considering the

program's strategic value in helping the poor meet their health needs, this study explored smoking and whether PKH providers have paid attention to promoting healthy living for their beneficiaries.

## METHODS

The data for this survey was collected in May-July 2019 regarding the smoking behavior of PKH beneficiaries in Kecamatan Kembangan West Jakarta. Criteria for respondents in this study were families who were PKH participants in Kembangan District starting in 2016, and until this study was conducted, they still received PKH. Determination of the sample using the estimation formula from Lemeshow, using the proportion of adult smokers, the 2018 Basic Health Assets results are 33.8%.

Because researchers do not know the proportion of smokers in PKH families, the researchers estimate the proportion of smokers in KPM PKH by 50%. According to Notoatmodjo (2010), if a certain proportion or characteristic is unknown, the proportion is estimated to be 50%. The degree of confidence (Confidence Level) that the authors set is 95%, with a 10% degree of deviation. The total sample is 379 samples (344 plus 10%).

No	Population		Number of samples
	Sub-District	Clusters	
1	Kembangan Utara	287	96
2	Meruya Selatan	214	71
3	Joglo	270	90
4	Meruya Utara	88	29
5	Srengseng	129	43
6	Kembangan Selatan	151	50
Total		1139	379

PKH family data were obtained from the Kembangan District's Social Service Office. Data from interviews with respondents are processed through the editing, coding, processing, and cleaning stages. Data analysis was univariate, bivariate, and multiple logistic regression [7].

Variable operational definitions. Smoking status if respondents smoke every day. Age consisted of two groups: those  $\leq 49$  years and  $> 49$  years. Gender female vs. male. Education is higher if completing senior high school or until university; low education if elementary school to junior high school. For "psychological dependence on smoking," "pro-smoking attitude," "positive health knowledge on smoking," and "social reasons for smoking" were measured from a number of relevant questions: defined as "yes" if the score is above the average, and "no" if below the average.

## RESULTS

Table 1 shows that respondents are male, age  $\leq 49$ , and have low education, with psychological dependence on smoking, a pro-smoking attitude, not enough knowledge on a healthy lifestyle, low income, poor FDS, and social reasons for smoking.

Of the 379 respondents, 85.2% were smokers. Active smokers in Indonesia in 2018 reached 60 million people, and 70% of them are from low-income families who, on average, receive social assistance, and one of them is direct cash assistance from PKH policies. This is contrary to the purpose of improving the welfare and health status.

Table 2 provides the results of a multiple regression of smoking status, based on education, psychology, attitudes, income, and personal references. Four variables influence smoking behavior: education, psychology, income, and personal references.

**Table 1. Characteristics of respondents (n=379)**

	Variables	%
Gender	Female	7.9
	Male	92.1
Age	>49 Tahun	45.4
	$\leq 49$ Tahun	54.6
Education	High	38.5
	Low	61.5
Household income	High	39.3
	Low	60.7
Psychological dependence to smoking	Yes	31.4
	No	68.6
Pro-smoking attitudes	Yes	49.1
	No	50.9
Positive health knowledge on smoking	Yes	60.4
	No	39.6
FDS	Good	41.2
	Poor	58.8
Social reason for smoking	Yes	52
	No	48

**Table 2. Determinants of smoking among PKH beneficiaries**

Variable	P-value	Coef B	Exp (B)	OR	95% CI	
					Lower	Upper
Low education (vs high)	0.030	0.686	1.985	1.985	1.070	3.682
Low income (vs high income)	0.002	-1.141	0.320	0.320	0.158	0.648
Psychological dependence to smoking (vs no dependence)	0.002	0.989	2.688	2.688	1.441	5.015
Pro smoking attitude (vs against)	0.339	0.297	1.346	1.346	0.732	2.478
Social reason for smoking (vs no social reason)	0.016	0.779	2.179	2.179	1.159	4.097

The highest value is in psychological dependence to smoking. Respondents with such dependence had 2.7 times more likely to smoke compared to those without psychological dependence.

## DISCUSSIONS

This study highlights several points to be discussed in connection with the PKH policy. The proportion of smokers is greater than non-smokers, and income has a significant effect on smoking behavior. It is necessary to make smoking prohibition regulations for PKH. PKH beneficiaries violating program's conditions should have relevant sanction and be consulted with health promotion counselors. The social protection agency needs to involve the Health Office through the Healthy Living Community Movement (*Germas*) by providing socialization or counseling and approaches Personnel about the dangers of smoking to PKH beneficiaries.

The companion team's role should always provide information about the dangers of smoking for health and between the counterpart team and beneficiaries by utilizing the communication network. The accompanying team exists as a discussion forum to provide health information, especially the dangers of smoking.

The results of the analysis showed that there was no relationship between age and smoking behavior ( $p$ -value  $0.790 > 0.005$ ). This study's age only includes 2 (two) age groups, namely under or equal to the age of 49 years and over 49 years, and can be homogeneous. If viewed from the perspective of individual growth and development, it tends to behave differently. Based on the description above, the hypothesis of a relationship between age and smoking behavior is not proven.

In this study, the analysis results obtained  $P$ -value = 0.788, which means there is no significant relationship

between sex and smoking behavior. There was a significant relationship between sex and smoking behavior [8].

The proportion of respondents in this study is relatively the same, so that there is no significant relationship between sex and smoking behavior. Based on the above explanation, the hypothesis of a relationship between sex and smoking is not proven.

There is a relationship between education and smoking behavior. The difference is that low education has a 1.98 times greater chance of smoking than higher education after controlling for other variables: there is a relationship between smoking and the respondent's education [9,10]. The awareness of the dangers of smoking is getting higher, along with higher education.

Psychological factors influence smoking behavior in respondents in this study. Psychology is a person's psychological state that affects smoking. In this study, the psychological variables were formed from 8 questionnaire questions. Negative psychology if  $\leq$  median. Respondents who smoke experience psychological effects such as stress, anxiety, confusion, and many other problems. Information obtained is that respondents with psychological dependence have a 2.68 times greater chance than respondents with psychological dependence to smoking after being controlled with other variables.

Other research also reveals that most respondents who smoke often experience psychological effects, including anxiety, stress, confusion, and many other problems, and they divert them by smoking to get a feeling of calm [11]. PKH beneficiary families who are low-income families have many problems, especially in terms of the family's economy, so that not a few of them smoke to reduce feelings of anxiety, anger, and anxiety due to these conditions. Seeking comfort when there is an unpleasant stimulus is part of the reason. The number of respondents smoked.

Behavior was found that there was no relationship between attitude and smoking behavior (p-value = 0.339). While in other studies, it was found that there was a relationship between attitude and smoking attitude [12,13]. The predisposing factor for the occurrence of the behavior in a person and also society. Attitude is one of the vague words but is most often used in behavioral science, is an evaluation of good and bad dimensions. Based on the description above, the hypothesis is that there is a relationship between attitude and behavior smoking is not proven.

No significant relationship between knowledge and smoking behavior in respondents (p-value = 0.323). Not in line with a study in low-income families in the Deli community health center: there was a relationship

between knowledge and smoking behavior [14]. This study reveals that low income has a smaller chance of 0.32 times than high income to smoke behavior after being controlled with other variables. Respondents were underprivileged families who received PKH. One of the program's intentions is to facilitate health and promote positive health practices, not buy cigarettes.

This study shows no relationship between participation in the monthly meeting and smoking (p-value = 0.471). According to Harry (2017), in the 2017 PKH Policy, the Family Capacity Building Meeting (P2K2) known as FDS is a structured learning process that aims to increase knowledge, understand the importance of education, family financial management, and health. It is not in line with this research because there is still much inferior quality of FDS implementation, seen from the participants' attendance, the companion team, or the FDS implementation process that needs improvement..

Personal references are someone's behavior that is influenced by people who are considered important so that what is said and done will be emulated. This study consisted of 5 questions on the questionnaire. Social reason for smoking if the total score of the questions  $\leq$  median, so smoking is influenced by the smoking behavior of people considered important. Social reasons have two times more likely to influence smoking after controlling other variables. Other people's presence as a reference (personal references) is a reinforcing factor for carrying out behavioral actions, but refers to individual considerations. Also, in order for an attitude to become real behavior, other supporting factors are needed in the form of facilities and other support in terms of personal reference in a residential environment.

PKH beneficiaries have low socioeconomic status with less insight into the dangers of smoking so that those who are seen are easily used as role models, which will then be done too. People around the house who are believed to be role models influence respondents. Psychology is the most dominant variable in which respondents with negative psychology have a 2.71 times greater chance of smoking than positive psychology.

The Social Protection Agency should issue a circular regulating the PKH conditions. Social protection authorities should evaluate the PKH policies in providing conditions for PKH families to commit not to smoke and be given sanctions if they violate the conditions given, for example, reducing the amount of assistance or stopping assistance for those who smoke. The Office of Social Affairs coordinates with the Health Office to improve the quality of PKH policies, namely

by increasing the quality of FDS services by including health materials, especially cigarettes, in the FDS module and involving health workers in implementing PKH policies in the form of involvement of health workers in providing health outreach or health education, especially hazards smoke. PKH workers could use the existing communication media network between PKH beneficiaries and facilitators as a discussion forum to provide health information, especially health issues.

## CONCLUSION

This study shows that most of the PKH beneficiaries in this study were smokers. It is surprising to know that program providers have not yet concerned about smoking among PKH beneficiaries, which conflicts with the program's health mission. In the future, PKH should become an entry point for the healthy living community movement, as widely campaigned by the health ministry.

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